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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	)	
	)	
Thomas V. JOHNSON et al.	)	Group Art Unit: 2171
	)	
Application No.: 09/895,077	)	Examiner: E. LeRoux
	)	
Filed: July 2, 2001	)	
	)	
For: METHODS AND SYSTEM FOR EFFICIENT	)	
ASSOCIATION TRAVERSALS	)	

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Attention: Ms. Margaret A. Focarino  
Director, Technology Center 2170

Madam:

**PETITION UNDER 37 C.F.R. §§ 1.144 AND 1.181  
FOR WITHDRAWAL OF RESTRICTION REQUIREMENT**

Pursuant to 37 C.F.R. § 1.144 and 37 C.F.R. § 1.181, Applicants respectfully petition the Director to reconsider and reverse the Examiner's final decision to withdraw claims 6-56 from consideration in the above-identified application pursuant to the Requirement for Restriction and Election of Species (Requirement) dated October 31, 2003.

**I. BACKGROUND**

On October 7, 2003, the Examiner telephoned Applicants' representative to request an oral response to a restriction requirement. When asked, the Examiner did not and could not present any basis for the proposed restriction. In fact, the Examiner

could not identify particular groups for Applicants to elect. Accordingly, Applicants' representative could not make an election because a proper restriction was not set forth by the Examiner. In response, the Examiner indicated that a written restriction requirement would be issued.

A written Requirement for Restriction and Election of Species was set forth in an Office Action dated October 31, 2003. The Examiner required restriction under 35 U.S.C. § 121 between the following Groups:

- I. Claims 1-5, drawn to method for determining relationship between objects, allegedly classified in class 707, subclass 1.
- II(a). Claims 6-10, drawn to method for maintaining reverse links in an object-oriented environment, allegedly classified in class 715, subclass 501.1.
- II(b). Claims 11-15, drawn to method for performing association traversals in an object-oriented environment, allegedly classified in class 707, subclass 100.
- II(c). Claims 16-17, drawn to system comprising a client and server for performing association traversals, allegedly classified in class 709, subclass 223.
- II(d). Claims 18-20, drawn to system for performing association traversals, allegedly classified in class 707, subclass 3.
- II(e). Claims 21-25, drawn to system for traversing associations in a common informational model, allegedly classified in class 705, subclass 1.
- II(f). Claims 26-28, drawn to system for maintaining reverse links in an object-oriented environment, allegedly classified in class 370, subclass 335.
- II(g). Claims 29-33, drawn to system for performing association traversals in an object-oriented environment, allegedly classified in class 705, subclass 7.
- II(h). Claims 34-36, drawn to method for tracking relationships between objects in an object-oriented environment, allegedly classified in class 709, subclass 315.

II(i). Claims 37-44, drawn to computer readable medium for performing a method for determining a relationship between objects, allegedly classified in class 707, subclass 103.

II(j). Claims 45-46, drawn to computer-readable medium including instructions for performing a method for maintaining reverse links, allegedly classified in class 370, subclass 315.

II(k). Claims 47-49, drawn to computer-readable medium including instructions for performing a method comprising association traversals, allegedly classified in class 707, subclass 213.

II(l). Claims 50-51, drawn to computer-readable medium including instructions for performing a method for performing association traversals, allegedly classified in class 705, subclass 35.

II(m). Claim 52, drawn to system comprising a client and server for performing association traversals by the client, allegedly classified in class 705, subclass 8.

II(n). Claim 53, drawn to system comprising a client and server for performing association traversals by the server, allegedly classified in class 709, subclass 217.

II(o). Claims 54-56, drawn to computer-readable medium for performing a method for tracking relationships between objects in an object-oriented environment, allegedly classified in class 700, subclass 90.

See *Paper No. 3*, pp. 2-3. In the same Office Action, the Examiner further required Election of Species under 35 U.S.C. § 121 between Species II(a)-(o), which are identical to Groups II(a)-(o), above. See *Id.* at pp. 3-4.

In a Response to the Restriction Requirement filed November 25, 2003, Applicants elected to prosecute Group I, claims 1-5 with traverse. *Paper No. 4*, p. 1. Applicants presented arguments traversing the restriction requirement, *Id.* at 2-8, and requested reconsideration of the restriction requirement in light of Applicants' traverse. *Id.* at 8.

The Examiner issued a first Office Action on the merits on December 24, 2003. However, contrary to the directive of M.P.E.P. § 821.01 (8<sup>th</sup> Ed., Rev. 1, Feb. 2003), the Examiner did not make the restriction requirement final or even reply to the arguments advanced in Applicants' traverse. *See Paper No. 5*. Instead, the Examiner merely acknowledged Applicants' traversal. *Id.* at 2.

On February 24, 2004, Applicants' representative telephoned the Examiner and requested an interview to discuss the merits of Applicants' traversal. In a subsequent telephone interview with Examiner LeRoux and Supervisory Examiner Metjahic on March 3, 2004, the Examiners agreed to reconsider the restriction requirement upon receipt of a response to the outstanding Office Action. *See Paper No. 6* (Interview Summary).

On March 16, 2004, Applicants filed an Amendment and Request for Reconsideration. In this paper, Applicants again requested that the Examiner reconsider the restriction requirement. *See Paper No. 7*, pp. 21-22 and 39.

On April 9, 2004, the Examiner issued a Final Office Action. Despite the Examiner's promise to reconsider the restriction requirement, the Examiner failed to make any reference to the restriction requirement or to Applicants' traverse. *See Paper No. 8*. Instead, the Examiner erroneously listed claims 6-56 as canceled. *Id.* at p. 2.

On May 11, 2004, Applicants' representative telephoned Supervisory Examiner Metjahic to discuss the merits of the restriction requirement and Examiner LaRoux's repeated failure to respond to Applicants' traverse. Applicants' representative again requested reconsideration of the restriction requirement in the light of Applicants' traverse.

In an Office Action dated June 25, 2004, the Examiner withdrew the finality of the previous Office Action and belatedly addressed some of Applicants' arguments with respect to the impropriety of the restriction requirement. The Examiner found the arguments that he chose to address unpersuasive and then made the requirement final. *See Paper No. 9*, pp. 2-3.

As explained above, and as required by 37 CFR § 1.181, Applicants have repeatedly requested reconsideration of the Examiner's Requirement for Restriction and Election of Species, without success. Accordingly, Applicants now respectfully petition the Director to reconsider and reverse the Examiner's final Requirement for Restriction and Election of Species.

## **II. THE MERITS OF THE RESTRICTION REQUIREMENT**

### **A. *Group I is not Related to Each of Groups II(a)-(o) as Combination and Subcombinations***

The Examiner asserts that Group I is related to each of Groups II(a)-(o) as combination and subcombination. *See Paper No. 3*, p. 3. Accordingly, the Examiner asserts that the methods of claims 1-5 are a combination of the methods, systems and computer-readable media of claims 6-56. This is clearly incorrect. It is improper to treat claims drawn to different categories of invention (i.e., system, method, computer-readable medium, etc.) as combination and subcombination.

For example, claim 37 recites a computer-readable medium including instructions for performing a method that includes the same steps as those recited in claim 1. Yet,

the Examiner asserts that claim 37 is a subcombination of claim 1. This assertion is clearly erroneous.

Even assuming, *arguendo*, that Group I is related to each of Groups II(a)-(o) as combination and subcombination, the Examiner's restriction is improper. To establish that a combination and subcombination are distinct, the Examiner must show two-way distinctness and provide reasons for insisting on restriction. The Examiner has failed to meet either of these burdens.

***B. The Asserted Groupings are not Distinct***

To show two-way distinctness the Examiner must show both (1) that the combination as claimed does not require the particulars of the subcombination as claimed, and (2) that the subcombination has separate utility. M.P.E.P. § 806.05(c) (8<sup>th</sup> Ed., Rev. 1, Feb. 2003). As discussed below, the Examiner has failed to satisfy either of these requirements.

***i. The Particulars of the Subcombinations***

The Examiner asserts that the combination of Group I does not require the particulars of any of the subcombinations of Groups II(a)-(o) "because the combination can be used to ascertain the association between data/methods pertaining to the objects." *Paper No. 3*, p. 4. However, the possible use of the combination is not determinative of whether the combination as claimed requires the particulars of the subcombinations. Here, the Examiner attempts to meet the first requirement for two-way distinctness by addressing the second. This is improper.

To show that combination does not require the particulars of any of the subcombinations, the Examiner must instead analyze the recitations of the claims. In fact, because claims 6-54 include recitations similar (or in some cases identical) to those of claims 1-5, the combination may require the particulars of claims 6-54.

Further, the ability to “ascertain the association between data/methods pertaining to the object” is not a distinction between the claims of Groups I and Groups II(a)-(o): the purported subcombinations of Groups II(a)-(o) can also be used for this purpose. For example, claim 11 recites, “performing association traversals in an object-oriented environment.” Moreover, claim 37 recites a computer-readable medium including instructions for performing a method that includes the same steps as those recited in claim 1. Thus, the Examiner has separated some claims that are similar in scope, but claimed as a different category of invention (i.e., system, method, computer-readable medium, etc.). This is clearly incorrect.

As explained, the Examiner has not provided evidence that the combination of Group I is patentable without the details of any of the subcombinations of Groups II(a)-(o). In fact, the Examiner’s assertion that the combination does not require the particulars of the subcombinations is contradicted by the recitations of the claims. Accordingly, the Examiner’s assertion that Group I is distinct from each of Groups II(a)-(o) is unsupported and the Requirement for Restriction should be withdrawn and claims 6-56 rejoined and examined on their merits.

**ii. The Utility of the Subcombinations**

The Examiner also attempts to show distinctness by stating that the subcombinations of Groups II(a)-(o) have separate utility “such as analyzing data contained via the Internet.” *Paper No. 3*, p. 4. However, the Examiner’s exemplary utility is so broad as to encompass many types of systems and processes that may be implemented by the various embodiments of the present invention. In fact, the Examiner’s hypothetical “separate” utility applies to the very combination the Examiner is attempting to distinguish: the asserted combination of Group I may also analyze data obtained via the Internet.

The flaw in the Examiner’s assertion of separate utility is clearly shown by comparing the inventions recited in claim 1 (Group I) and claim 37 (Group II(i)). Both claims recite a method comprising the steps of “creating, for the first instance, a reverse link that defines a relationship between the first instance and the association; and determining a relationship between the first and second instances based on the reverse link.” It is unclear to Applicants how the Examiner finds separate utility between claims that include the same method steps.

As explained, the Examiner has not provided evidence that the subcombinations of Groups II(a)-(o) have utility different from the combination of Group I. Applicants submit that claims 1-56 are not distinct, but rather claim a single invention with varying scope. Accordingly, the Examiner’s assertion that Group I is distinct from each of Groups II(a)-(o) is unsupported and the Requirement for Restriction should be withdrawn and claims 6-56 rejoined and examined on their merits.



**C. *There Are No Reasons to Insist Upon Restriction***

To establish reasons for insisting upon restriction, the Examiner must show separate classification, a separate status in the art, or a different field of search. M.P.E.P. § 808.02 (8<sup>th</sup> Ed., Rev. 1, Feb. 2003). In the original restriction requirement, the Examiner attempted to justify the restriction by asserting that each of Groups I-II(o) have acquired a separate status in the art by reason of their allegedly divergent subject matter. *See Paper No. 3*, p. 6. In the second Final Office Action, the Examiner also asserts that the Groups are separately classified and, thus, allegedly require separate searches. *See Paper No. 9*, p. 3. However, these assertions are based upon the Examiner's arbitrary and erroneous classification of the subject matter of the claims in divergent class/subclass combinations.

When setting forth the alleged separate classifications, for example, the Examiner appears to read just the preamble of the independent claims without considering the recitations in the body of these claims. For instance, the Examiner has identified Group I as directed to "a method for determining relationship between objects," which is the exact language of the preamble of claim 1. The Examiner has further identified Group II(a) as directed to "a method for maintaining reverse links in an object-oriented environment," which is the exact language of the preamble of claim 6. When classifying the claims, however, the Examiner cannot merely look at the preamble; the Examiner must also consider the scope of the subject matter defined by the body of the claims.

As a result of this improper focus on the preamble of the claims, the Examiner has classified claims that include identical recitations in different subclasses. For

example, claim 1 is classified in class 707, subclass 1, while its counterpart system claim 21, and counterpart computer-readable medium claim 37 are classified in class 707, subclass 1 and class 707, subclass 103, respectively. *See Paper No. 3*, pp. 2-3. The same inconsistencies can be found for claim 6 and its counterpart system claim 26 and computer-readable medium claim 42, which are classified in class 715, subclass 501.1, class 370, subclass 335, and class 707, subclass 103, respectively. *Id.*

A clear indication of the arbitrariness of the Examiner's attempts to classify claims 1-56 in divergent areas can be shown by reviewing the Examiner's treatment of claims 37 and 42. As explained, claim 37 is a computer-readable medium claim that parallels the method of claim 1. That is, claim 37 is drawn to a computer-readable medium including instructions for performing a method similar to that recited in claim 1. Claim 42 is a computer-readable medium claim that parallels the method of claim 6. In the Requirement for Restriction, the Examiner has placed both computer-readable media claims 37 and 42 in the same group, Group II(i). *See Paper No. 3*, p. 2. Yet, the Examiner places their counterpart method claims 1 and 6 in different groups (Groups I and II(a), respectively). *Id.* at 3. This inconsistency cannot be reconciled.

As a further example, the Examiner classifies claims 26-28 (Group II(f)) in class 370, subclass 335. *Id.* At the same time, the Examiner classifies claims 6-10 in class 715, subclass 501.1. *Id.* As explained, claim 26 is a system claim corresponding to method claim 6. This inconsistency also cannot be reconciled.

Finally, when classifying the claims, the Examiner has apparently ignored the definitions in the Manual of Classification. This is obviously improper. For example, the

Examiner classifies Group II(f) in class 370, subclass 335. *Paper No. 3*, p. 2. This subclass is directed to systems or methods for:

[c]ombining or distributing information via code word channels using multiple access techniques (e.g., CDMA): This subclass is indented under subclass 329. Subject matter wherein spread spectrum codes are allocated to allow multiple signals occupying the same channel bandwidth to be transmitted simultaneously without interfering with one another.

*Manual of Classification Definitions*, Class 370, Subclass 335. However, a cursory review of the Application and claims will show that Applicants have not claimed multiplexing or duplexing systems or methods, as defined by class 370, subclass 355.

The Manual of Classification is not the model of inefficiency that the Examiner's classification of Groups I-II(o) would suggest. As explained, claims 1-56 are all directed to a single invention with varying scopes. Any attempts to classify the claims in different classes and subclasses is improper. Accordingly, the Examiner's attempt to justify the Requirement for Restriction is unsupported and the Requirement for Restriction should be withdrawn and claims 6-56 rejoined and examined on their merits.

***D. Applicants' Claims are not Directed to Patentably Distinct Species***

"The general test as to when claims are restricted, respectively, to different species is the fact that one claim recites recitations which under the disclosure are found in a first species but not in a second, while a second claim recites recitations disclosed only for the second species and not the first." See M.P.E.P. § 806.04(f) (8<sup>th</sup> Ed., Rev. 1, Feb. 2003).

Claims 1-56 each include at least some recitations that are similar and/or identical to other claims (e.g., claims 1 and 37). As explained, claims 1-56 are directed

to a single invention claimed with varying scope. The claims are directed to systems, methods, and/or computer-readable media that perform association traversals using reverse links or pointers, and/or wrapper or object tables.

For example, claim 1 includes a step of creating, for a first instance, a reverse link that defines a relationship between the first instance and an association. Claims 6, 9 and 10 are directed to methods for maintaining reverse links including pointers and wrapper tables. Claims 11, 14, 15, 16 and 17 are directed to methods for performing association traversals whereby the methods includes steps that include pointers. Claim 18 is directed to a system for performing association traversals including object wrappers associated with objects. Claim 21 parallels claim 1. Claim 26 parallels claim 6. Claim 29 parallels claim 11. Claims 32 and 33 parallel claims 14 and 15, respectively. Claim 34 is directed to a method for tracking relationships between objects by at least determining a relationship between at least one object and a first association object. Claim 37 parallels claim 1. Claim 42 parallels claim 6. Claim 45 parallels claim 9. Claim 46 parallels claim 10. Claim 47 parallels claim 11. Claims 50, 51, 52 and 53 parallel claims 14, 15, 16, and 17, respectively. And, claim 54 parallels claim 34.

As explained, claims 1-56 are not directed to separate species. Instead, all of the claims of the Application are directed to a single invention recited with varying scope. Accordingly, the Examiner's Requirement for Election of Species should be withdrawn and claims 6-56 rejoined and examined on their merits.

### III. CONCLUSION

Applicants are not required to draft each claim with identical terms and phrases to avoid a Requirement for Restriction. A proper review of claims 1-56 shows that these claims are directed to a single invention recited with varying scope. Accordingly, Applicant respectfully requests that the Director reconsider and reverse the Examiner's Requirement for Restriction and Election of Species, and order the rejoinder and examination of claims 6-56 on their merits.

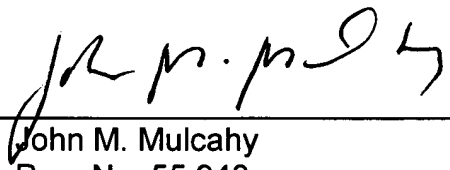
Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Date: August 11, 2004

By: \_\_\_\_\_

  
John M. Mulcahy  
Reg. No. 55,940